

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR02/01935

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 C10L 1/32**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C10L 1/32, B01F 3/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean Patents and applications for inventions since 1975  
Korean Utility models and applications for Utility models since 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
eKIPASS**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 2001-40739 A (ELF ANTAR FRANCE S.A.) 15 May 2001 see claims 7 - 12 and figure 1	1 - 24
A	US 6030424 A (SETSUO MATSUMOTO) 29 February 2000 see page 7 and figure 4	1 - 24
A	US 6368366 B (LUBRIZOL CO.) 09 April 2002 see claims 28 - 39	1 - 24
A	JP 62-179596 A (HOTSUKOU KK) 06 August 1987 see the whole document	1 - 24

 Further documents are listed in the continuation of Box C. See patent family annex.

- \* Special categories of cited documents:  
 "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

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 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

Date of the actual completion of the international search  23 JULY 2003 (23.07.2003)	Date of mailing of the international search report  24 JULY 2003 (24.07.2003)
Name and mailing address of the ISA/KR   Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer  WEON, Yong Jun  Telephone No. 82-42-481-5996  

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.

PCT/KR02/01935

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 2001-40739 A	15-05-2001	CA 2320342 A BR 9907726 A WO 200034419 A FR 2786780 A AU 200015675 A EP 1051464 A CN 1290292 T	15-06-2000 17-10-2000 15-06-2000 09-06-2000 26-06-2000 15-11-2000 04-04-2000
US 6030424 A	29-02-2000	NONE	
US 6368366 B	09-04-2002	NONE	
JP 62-179596 A	06-08-1987	NONE	